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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,032	02/23/2004	John MacDougall	SNC-134. US 5008-134-10	3788
55678	7590	02/01/2006	EXAMINER	
MILTON, GELLER, LLP 700 - 225 METCALFE STREET OTTAWA, ON K2P-1P9 CANADA			CHAMBERS, TROY	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,032	MACDOUGALL, JOHN	
	Examiner	Art Unit	
	Troy Chambers	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-36 is/are pending in the application.
- 4a) Of the above claim(s) 21, 22, 25, 26 and 30-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-20, 23, 24 and 27-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 21, 22, 25, 26 and 30-36 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 21, 22, 25, 26 and 30-36 have not been further treated on the merits.

Specification

2. The disclosure is objected to because of the following informalities:
 - a. In the Brief Description of the Drawings, remove the reference to deleted drawings 11A, 12A, 13 and 14.
 - b. Applicant should amend the specification to use the drawing reference numbers when discussing the projectile.
 - c. The specification should provide antecedent basis for each term in the claims. So, for example, "midsection portion" and "fully encircling gap" should be found in the specification. This list is not exhaustive.Appropriate correction is required.

Claim Rejections - 35 USC § 102

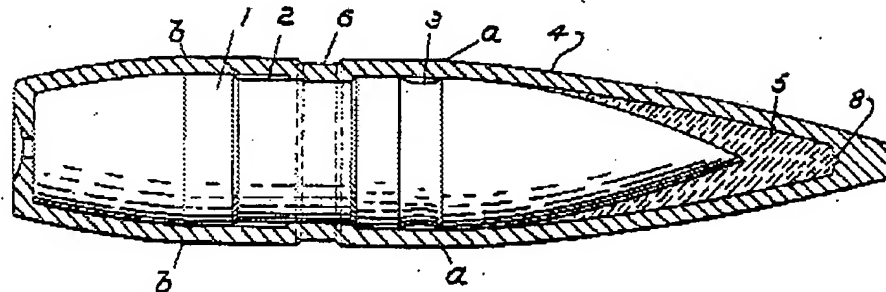
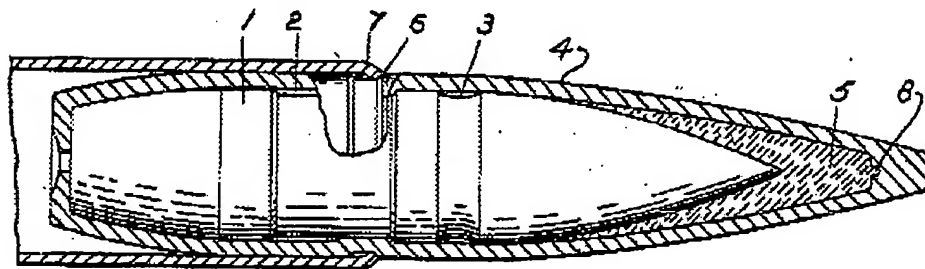
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 14-18, 23, 24, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2322751 issued to Studler.

Fig - 1Fig - 2

5. With respect to claim 14, Studler discloses a projectile having an engravable jacket 4; and a central cylindrical core 1 having an annular grooves 2, 3 at its "midsection portion". The grooves 2, 3 discontinue contact between the core 1 and the jacket 4 at those locations. The midsection grooves taper toward both ends of the projectile.

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6. With respect to claims 15-17, the gap formed by the tapered grooves 2, 3 fully encircle the core 1 and form a space between said jacket 4 and said core.

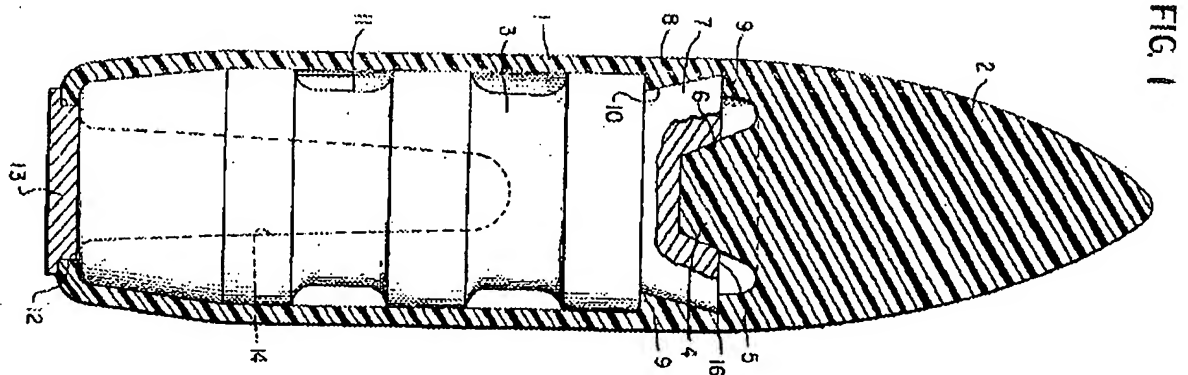
7. With respect to claim 18, the midsection tapers and is therefore frustoconical in shape.

8. With respect to claims 23 and 24, the grooves 2, 3 are comprised of empty space and therefore occupied by air.

9. With respect to claim 27, Figures 1 and 2 show the core 1 having an ogival shape. The junction between the forward and the midsection provides a "smooth" transition zone.

10. With respect to claim 28, Figures 1 and 3 appear to show the rear of the core 1 tapering inward.

11. Claims 14-17, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3348486 issued to Rapp.



12.

13. With respect to claim 14, Rapp discloses a projectile comprising an engravable jacket 1 having a central core with a "midsection portion" not in continuous contact with

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the jacket because of the presence of annular grooves 11. The annular grooves taper toward the forward and rear ends of the projectile.

14. With respect to claims 15-17, the gap formed by the tapered grooves 11 fully encircle the core 3 and form a space between said jacket 1 and said core.

15. With respect to claims 23 and 24, the grooves 11 are comprised of empty space and therefore occupied by air.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 19, 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studler in view of established case law. Studler discloses a jacketed projectile as discussed above including a midsection with a taper. However, Studler does not disclose the dimensions as claimed by the applicant. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the dimensions claimed by the applicant, since it has been held that where the general condition of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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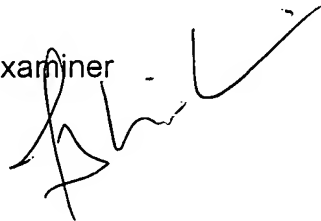
Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited on form PTO-892 are cited as of interest to show similar projectiles.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (571) 272-6874 between the hours of 7:00 a.m. to 3:30 p.m., M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (571) 272-6873.

Troy Chambers, Examiner

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A handwritten signature in black ink, appearing to be 'Troy Chambers', is written over the printed name and art unit.